4-24-1993

Radio Controlled Dog Training Shock Collar

Scott E. Seiler
Indiana University - Purdue University Fort Wayne

RADIO CONTROLLED DOG TRAINING SHOCK COLLAR

EET 491 PROJECT REPORT

Submitted to

Harold L. Broberg

Project Advisor

and

Electrical Technology Department

Prepared by

Scott E. Seiler

April 24, 1993

TABLE OF CONTENTS

1.0 LIST OF FIGURES iv
2.0 ABSTRACT v
3.0 INTRODUCTION 1
    3.1 STATEMENT OF PROBLEM 2
    3.2 PURPOSE OF REPORT 3
    3.3 SCOPE OF REPORT 4
4.0 TRANSMITTER 5
    4.1 ELECTRICAL COMPONENTS 6
    4.2 CIRCUIT SCHEMATIC 7
    4.3 TRANSMITTER OPERATION 8
    4.4 TRANSMITTER PROBLEMS 9
5.0 RECEIVER 10
    5.1 ELECTRICAL COMPONENTS 11
    5.2 CIRCUIT SCHEMATIC 12
    5.3 RECEIVER OPERATION 13
    5.4 RECEIVER PROBLEMS 14
6.0 CONCLUSION 15
7.0 REFERENCES 16
    APPENDIX A: THE INITIAL PROPOSAL 19
    APPENDIX B: COST ANALYSIS 20
    APPENDIX C: NOTES / DIMENSIONS 21
    APPENDIX D: ELECTRICAL CHARACTERISTICS 22
    APPENDIX E: OPERATING CHARACTERISTICS 23
    APPENDIX F: LOG SUMMARY 24

2.0 ABSTRACT

This report describes the construction and testing of a Radio Controlled Dog Training Shock Collar (RCSC). Used to solve the problem of control of a dog for training purposes.

The electrical schematics and description of components for the RCSC are shown. Additionally the function and relationship of the transmitter and receiver are detailed. Also problems and solutions that were encountered during testing are discussed.

Anyone interested in or having a need for a battery operated remote triggered shock collar for a dog would find this project useful. Additionally the electrical components used for the RCSC could easily be adapted to other remote control applications where digital code is used to activate a device.